

MISSOURI. Conservationist

VOLUME 68, ISSUE 4, APRIL 2007 • SERVING NATURE & YOU



The Experiment

Throughout our 68 years, the *Missouri Conservationist* has undergone more than a few changes. As we have changed to better serve Missouri's citizens, our readers have given us tremendous support.

"I regularly get positive comments about the *Missouri Conservationist*," Director John Hoskins said. "More people identify the Missouri Department of Conservation and its services with the *Conservationist* than anything else."

The *Conservationist* began its quest to serve Missouri citizens in July 1938. In the first issue, then Conservation Commission Chairman E. Sydney Stephens wrote a column that laid down the purpose and nature of the *Conservationist*. Mr. Stephen's words remain relevant to us today. In his column he said:

"In response to an apparent desire for information concerning the activities of the Conservation Commission, and in order to provide information for the guidance of individuals and groups interested in the conservation of wildlife, this publication is being issued. Its purpose is to keep the public informed as to the policies and plans of the department as the work of organization and administration progresses.

"Suggestions as to the subject matter of future issues are solicited. It is our purpose to use this publication as one of the several phases of service by the Commission to the people of the state.

"The publication is in the nature of an experiment. Its continuance will be determined by the extent of the interest that is manifested in its contents by those to whom it is sent."

With guidance from the past, we continue to try to improve the quality of the *Conservationist*. With this issue we have

re-tooled the old News and Almanac section into the NextGEN section (starting on page 4). All the information you have come to expect in News and Almanac, you'll now find in the NextGEN section. We have also expanded the number of pages and created categories in order to bring you more news on fish, forests and wildlife.

Each page of the NextGEN section will report on a different goal we set in our new Department plan, *The Next Generation of Conservation*. We unveiled this plan in the September 2006 issue. You can read more about it at www.missouri-conservation.org/12843.

Other new additions will tell you what's on our Web site (page 4), take you on a conservation retrospective (page 33), and give you the latest information on regulations (page 33). What isn't changing? We will deliver the same quality photography and information on our fish, forests and wildlife that you have come to expect.

As Mr. Stephens said in 1938, our existence depends on your interest and support. As members of our conservation team, we hope you will let us know how we're doing and if you have any suggestions for future subjects you would like us to cover (see page 3 for contact information). We value you, our readers, and hope to have the privilege of serving you for a long time.

Ara Clark, editor in chief



I grew up in Mexico, MO, and attended the Missouri School of Journalism. My appreciation for the outdoors developed at a young age as I explored the fields and woods near my home. I take great pride in doing my part to ensure Missouri's conservation heritage.

OUR MISSION: *To protect and manage the fish, forest and wildlife resources of the state; to serve the public and facilitate their participation in resource management activities; and to provide for all citizens to use, enjoy and learn about fish, forest and wildlife resources.*



FEATURES









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Story and photos by Noppadol Paothong
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Eastern gamagrass returns to Missouri's bottomlands and wet prairies.
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by Joe Bonneau, photos by Cliff White
For great fishing off the beaten path, try conservation area ponds.

ON THE RAILS

King rails used to be common in the marshes along our large rivers, but only a handful of these birds now visit our state each year. *Conservationist* photographer Noppadol Paothong captured this image (left) and the cover image while pursuing this Missouri endangered bird for his photo essay that begins on page 14. To learn more about Missouri's endangered species visit www.missouriconservation.org/8227.

NextGEN

This section reports on goals established in *The Next Generation of Conservation*. To read more about this plan visit www.missouriconservation.org/12843.

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Regulations reflect Missourians' CONSERVATION COMMITMENT

by John Smith

Missourians value the state's forests, fish and wildlife. To ensure these resources are protected, each year the Regulations Committee reviews the Wildlife Code of Missouri. Also each year, the public, as well as Department of Conservation staff, bring proposed changes for the committee to review.

During the review process, the committee researches the effects of the proposed regulation changes. Information reviewed by the committee often includes costs to the taxpayers, effects on wildlife populations, user group surveys, public comments and feasibility studies. When research shows a change could improve management of a species or provide more opportunities for Missourians to enjoy the outdoors, a proposed regulation change is sent to Director John Hoskins. If he approves the change, he submits the proposal to the Conservation Commission, four citizens appointed by the governor. If passed by the Commission, the proposed changes are filed with the secretary of state and published in the Missouri Register, which can be found at <http://mda.mo.gov/state/regulations>.

The filing begins the 30-day public comment period. If no comments are received, the final regulation is filed and becomes effective either 30 days after publication in the State Code of Regulations or on the date specified in the proposal. When comments are received, the Regulations Committee reviews the proposal. Based on the public's comments, the Commission may decide to drop, modify or implement the regulation.

To take advantage of the latest breeding statistics, population surveys and harvest data from the previous hunting season, some season dates and limits can become effective in a shorter time frame. In rare circumstances, emergency rules can become effective 10 days after filing with the secretary of state.

Letters, e-mails and phone messages from Missourians concerning regulation changes are shared with the Regulations Committee. Not every suggested

change can be made, but all suggestions are carefully reviewed. If you would like to see what changes are being considered, go to www.missouriconservation.org/regagenda/.

Last year's review resulted in the following:

Fishing

Joachim Creek from the Highway V bridge to the Highway A bridge in Jefferson County now has a length limit of 15 inches for all black bass and a daily limit of one smallmouth bass. These restrictions will help maintain a quality smallmouth bass population as fishing pressure increases in this watershed.



Restrictions on length and daily limits help improve bass fishing opportunities in streams with increased fishing pressure.

www.missouriconservation.org 27

week, I saw eight to 10 of them in a small tree near my office in St. Louis and wondered what they were. My husband has noticed them near holly in our yard as well. We also enjoyed your February article about the Master Naturalist program [*Humanity for Habitat*]. Thank you Ginny Wallace and Bob Pierce for creating this wonderful program—both an opportunity for education and much-needed volunteerism.

Kathy Bretsch, Webster Groves

MORE NURSERY NEWS

We would like to find out more about the George O. White State Forest Nursery and what types of seedlings are included in the Quail Cover Bundle. Do they have a Web site?

Margaret Weeks, via Internet

MY CUP OF TEA

[*Wildlife Code Changes*; February] I loved the dainty way she was holding the bird! Those were the positions of the fingers I was taught for holding a cup of afternoon tea. She is a darling girl.

Dorothy Harris, Mount Vernon

GOOD CIRCULATION

I do not recall ever writing to a magazine before, but today I was compelled to thank each one of you who help create this amazing work of love. The coverage, the artwork and the photography are exquisite and second to none.

Last week I realized I had not received the *Conservationist* for quite some time, so I called the Circulation department. To my surprise and

delight, I found a brown package hanging on my mailbox just a couple of days after I called. Here were all the back issues I had missed and I was up to date again. I can't believe the courteous, prompt service extended to me for a free, quality magazine such as this.

Ron Wilson, Chilhowee

NATURALIST WONDERS

Our family loves your magazine, and our two young daughters look forward to its arrival each month. I was especially excited to see the cedar waxwing on the February cover. Just last



Editor's note: For more information about the nursery and its stock, visit www.missouriconservation.org/7294.

Or, you can phone 800-392-3111 (recorded message on stock availability and shipping) or 573-674-3229. You can also fax them at 573-674-4047 or write to George O. White Nursery, Missouri Department of Conservation, P.O. Box 119, Licking, MO 65542.

Please note that no phone orders are accepted. Orders can be submitted by mail, Internet or fax. Orders are filled on a first-come, first-serve basis until supplies are depleted, and each year many species sell out quickly. Orders will be taken until April 30.

REGULATIONS UPDATE

The first regulation change under "Fishing" in *Wildlife Code Changes* [February] should have read as follows: "Joachim Creek, from the Highway V bridge to the Highway A bridge, in Jefferson County, now has a length limit of 15 inches for smallmouth bass and a daily limit of one smallmouth bass." The statewide limit of 12 inches for other black bass (largemouth and spotted bass) still applies in this area of Joachim Creek. We regret any confusion this may have caused our readers. You can view the Code of State Regulations at www.sos.mo.gov/adrules/csr/current/3csr/3csr.asp.



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Equal opportunity to participate in and benefit from programs of the Missouri Department of Conservation is available to all individuals without regard to their race, color, national origin, sex, age or disability. Questions should be directed to the Department of Conservation, P.O. Box 180, Jefferson City, MO 65102, 573-751-4115 (voice) or 800-735-2966 (TTY), or to the U.S. Fish and Wildlife Service Division of Federal Assistance, 4401 N. Fairfax Drive, Mail Stop: MBSP-4020, Arlington, VA 22203.

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Reader Photo

CARDINAL TRUTHS

Though most successful in winter, it is increasingly common to feed birds throughout the year. The single most successful food is black-oil sunflower seed. White proso millet and thistle (or niger) seed may attract additional species. For more information about birds in Missouri, visit www.missouriconservation.org/8145. This photo was taken by Patricia L. White of Weatherby Lake.

on the WEB

This month check out our featured Web pages, or go online anytime to find out more about conservation at www.missouriconservation.org.



TREE CITY

www.missouriconservation.org/7367

Shade that blocks the searing heat of a summer day and leaves that help generate the air we breathe are among the many reasons to care for your community trees.



SPRING TURKEY

www.missouriconservation.org/7498

Take this opportunity to learn about wild turkeys, how you can enjoy turkey hunting and perhaps improve your chances of bagging a bird.



KIDS' FISHING DAYS

www.missouriconservation.org/4164

Throughout the year the Department of Conservation and sponsoring organizations provide young anglers and their families with lots of opportunities to learn to fish.



ASK THE OMBUDSMAN

Q: Can a person with a felony conviction hunt with a shotgun or rifle?

A: The short answer is, if the person has served time or had a suspended execution of sentence, probably not. There are laws prohibiting the possession of firearms and ammunition for those termed "prohibited persons" by federal statute. Among those who are deemed prohibited persons are individuals convicted of a crime punishable by imprisonment for a term exceeding one year and those convicted of a misdemeanor crime of domestic violence. For a complete list of prohibited persons, or for answers to questions on this topic, please contact your local Bureau of Alcohol, Tobacco, Firearms and Explosives or the Missouri Attorney General offices or visit their Web sites at www.atf.gov and www.ago.mo.gov, respectively.

While it may be unlawful for a prohibited person to possess a firearm or ammunition, he or she may be able to hunt by means other than firearms. Chapter 7 of the *Wildlife Code* provides for bow, crossbow, slingshot, atlatl and cage-type trap as methods for hunting.

A hunting permit should be available to anyone who meets the requirements found in Chapter 5 of the *Wildlife Code*, unless the person has had his or her hunting privilege revoked. Reasons for privilege revocation are a serious wildlife code violation, multiple code violations, failure to pay child support or injuring someone else in a hunting accident. The *Wildlife Code* is online at www.sos.mo.gov/adrules/csr/current/3csr/3csr.asp. Printed versions are available at permit vendors statewide.

Ombudsman Ken Drenon will respond to your questions, suggestions or complaints concerning Department of Conservation programs. Write him at P.O. Box 180, Jefferson City, MO 65102-0180, call him at 573-522-4115, ext. 3848, or e-mail him at Ken.Drenon@mdc.mo.gov.

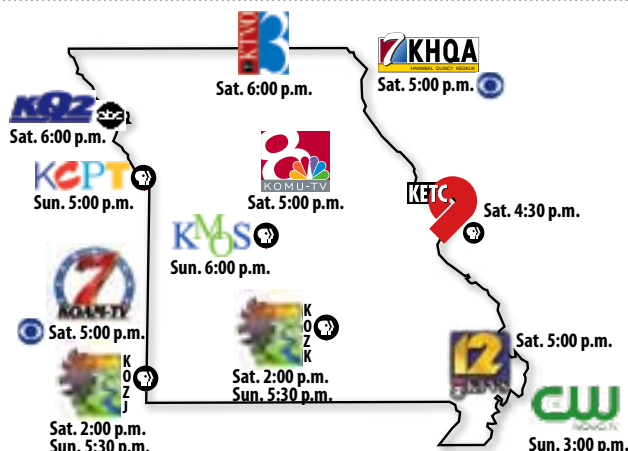
on the TV

For additional show information and video clips, be sure to visit

www.missouriconservation.org/8726.



Television
the way
nature
intended!





Species of Concern

Ozark Cavefish



Common name: Ozark cavefish

Scientific name: *Amblyopsis rosae*

Missouri range: Barry, Christian, Greene, Jasper, Lawrence, Newton and Stone counties

Classification: State endangered, federally threatened

To learn more: www.missouriconservation.org/122

EYES ARE NO use in the absolute darkness of a cave. Without light, there is no need for camouflage to hide from predators. The Ozark cavefish has lived in lightless habitats for so long that the species has lost its eyes and color. Sense organs on the sides of its head and body help it find food.

Ozark cavefish are at the top of the food chain in the aquatic cave ecosystem. They eat small salamanders, crayfish and other small invertebrates that in turn receive their source of energy from bat guano.

Water pollution is the biggest threat to this species' survival. Because rainfall trickles down into the cavefish's home from the land above, its survival depends on good stewardship of private land.

The Department of Conservation received a grant from the U.S. Fish and Wildlife Service to partner with private landowners in Southwest Missouri to protect recharge areas affecting the state-endangered Ozark cavefish. Landowners in these areas will be eligible for special cost-share rates when implementing conservation practices that benefit groundwater and cavefish protection. Contact Blake Stephens at the Department of Conservation Neosho office for more information at 417-451-4158, or e-mail Blake.Stephens@mdc.mo.gov.

Morel Madness

Elusive but delicious, these fungi are worth hunting for.

Morels are likely to be popping up right now. Start hunting when the average of daily high and low temperatures reaches the 50s. Check stream valleys, mature forests and areas affected by forest fire. Morels appear first on south-facing slopes and last on cooler sites. Take a mesh bag or basket to carry your treasure. When you spy one, drop your cap to mark the spot and carefully examine the surrounding ground for more. To learn more about Missouri's mushrooms visit www.missouriconservation.org/8360.



MOFEP Spells Understanding

How timber harvests affect other plants in a forest.

When researchers launched the 100-year Missouri Ozark Forest Ecosystem Project (MOFEP) in 1990, they hoped to learn how different timber-management methods affect forests at every level, from towering oaks to tiny bugs. Results are trickling in, and some are surprising.

No one expected the species richness of forest-floor plants to decrease in areas with no timber harvest (an average of -1.8 species per plot), while richness increased in areas where all or some of the trees were cut (+1.8 to 2.5 species per plot). Legumes such as tick trefoil decreased in abundance in harvested sites, while wild grapes and blackberry vines increased. Plant species richness benefits wildlife.

To learn more about MOFEP, visit www.missouriconservation.org/9448.





Shooting Range

Visit Parma Woods for safe outdoor fun in Parkville.

Parma Woods Shooting Range and Outdoor Education Center offers Kansas City-area shooters a safe, modern facility for independent shooting. Free instruction is offered in shotgun, rifle, pistol and archery shooting. Individual use of the range is on a first-come, first-served basis, group use is by reservation only. Range fees are \$3 per booth per hour for rifle, pistol, shotgun patterning and archery. The range is open Friday through Tuesday, year-round. For more

information call 816-891-9941 or visit www.missouriconservation.org/2338.



Spring float: Lamine River

Opportunities abound on this Missouri River tributary.

The Lamine River runs 59 miles through Cooper County before losing itself in the Missouri River. It is an easy float, with excellent fishing for catfish, bass, crappie, bluegill and drum. Hunters may linger at Lamine River Conservation Area (CA), where 15 miles of river frontage give easy access to 5,800 acres of deer, turkey, squirrel and waterfowl hunting. There is camping and a convenient canoe put-in spot at the south parking area on Highway 50. Additional camping and a boat ramp are found at Highway A. Other public accesses include Swinging Bridge north of Clifton City, Roberts Bluff south of I-70, Harriman Hill off Highway M

and de Bourgmont on Highway 41. Most of the Lamine is floatable throughout the year, but you may have to walk your canoe through riffles in the upper river during dry weather.

Trail Guide



POOSEY CA



WHETHER YOU ARE looking for a short walk or an all-day adventure on foot, bicycle or horseback, Poosey Conservation Area (CA) has a trail for you. This 5,738-acre area in Livingston and Grundy counties also has a picnic area, pavilion, fishing ponds and firearms and archery ranges.

The Green Hills Trail, a 5-mile trail along the west shore of 192-acre Indian Creek Community Lake, is open to hikers and bikers. Leave a vehicle at one end of this linear trail to avoid backtracking. On this jaunt, you might see shorebirds and a profusion of woodland wildflowers and songbirds. Be aware that parts of the Green Hills Trail are steep, with loose, rocky footing.

The northern half of Poosey CA has a 20-mile network of trails and service roads that are open to foot, bicycle and equestrian use. This network describes a series of loops through upland forest, prairie and cropland. All trails at Poosey CA are closed during firearms deer season.

No. of trails: Two, totaling 25 miles

Unique features: Songbirds, shorebirds, fern-draped rock walls

Detailed information: www.missouriconservation.org/2930, and search "Poosey"



TAKING ACTION

Thomas Hart Benton Group

Group featured: Thomas Hart Benton Group of the Sierra Club
Group mission: Restore and maintain Hidden Valley Natural Area
Group location: Kansas City
Contact by Phone: 816-561-1061, ext. 116
For more information: www.kcwildlands.org or visit
www.missouriconservation.org/8364



THE TOWERING TREES, lush ferns and colorful wildflowers of Hidden Valley Natural Area give Kansas City residents a beautiful place to escape the fast-paced city. Hidden Valley, administered by the Kansas City Parks and Recreation Department, is an excellent example of how citizens can take action through the Missouri Natural Areas

System (MNAS) to preserve our natural resources. MNAS was created in 1977 to identify, protect and restore the best examples of Missouri's natural heritage. The Kansas City WildLands organization, in cooperation with The Thomas Hart Benton Group of the Sierra Club and the Parks Department, work with volunteers to eradicate exotic plants and eliminate abuse from off-road vehicles.

Celebrate the 30th anniversary of MNAS by touring Kansas City natural areas, Saturday, April 14.

TRIM Applications

Take action to keep the trees in your community healthy.

Get funding to enhance or start a local tree care project from the Tree Resources Improvement and Maintenance (TRIM) program. TRIM provides reimbursement of \$1,000 to \$10,000 to assist government agencies, public schools and non-profit groups with the management, improvement or conservation of trees on public lands. The TRIM grant application period is open through June 1. For details about the program or a TRIM grant application, visit the Department's forestry page at www.missouriconservation.org/7367.

**Master Naturalist**

Regal fritillary butterflies discovered in Cooper county.

Members of the Boone's Lick Chapter of the Missouri Master Naturalist program made a royal find during a butterfly inventory conducted at the Overton Bottoms Unit of the Big Muddy National Fish and Wildlife Refuge. Regal fritillary butterflies were found to inhabit the area, providing the first documentation of the species in Cooper County. The find is significant because regal fritillary populations are on the decline due to the loss of tallgrass prairie habitat. Data collected from the inventory was used to create a reference collection and a display for a future visitors' center at the refuge.

For more information about how to become a Master Naturalist, e-mail Master.Naturalist@mdc.mo.gov or visit www.monaturalist.org.





Spring Turkey

Less-vocal birds may require more time scouting.

Patience and preseason scouting will be the key to turkey hunting success this spring. Missouri's turkey flock experienced poor production in 2005, so we will have fewer 2-year-old birds this spring. Gobbling may be less intense in some areas because 2-year-old birds tend to be vocal while older gobblers often spend more time strutting and courting hens. This may require hunters to work harder to call in a bird. Jeff Beringer, Department turkey biologist, expects the turkey harvest to be about the same as last year's total of 54,712, if we have fair weather. To find more information about the spring turkey season visit www.missouriconservation.org/7498.



Crappie Fishing

Celebrate spring by taking a child crappie fishing.

There's no better time to fish for crappie than mid-April to early May, when the fish are spawning and eager to bite. Fishing trips that provide good chances to reel in fish are more exciting for children and may encourage them to make fishing a hobby.

Spawning crappies can be caught with jigs, minnows, small crankbaits or spinners. Fish brushpiles and standing timber, where crappies concentrate.

To get the most from your outing, remember to pack snacks, drinks, sunscreen, bug spray and personal flotation devices. Bring a camera to record the youngster's first catch. Visit www.missouriconservation.org and search "First Fish" for First Fish Awards.



Turkey Hunting

Scout it Out



Area name: Whetstone Creek Conservation Area

Directions: Whetstone Creek CA is located in Callaway County. From the I-70 Williamsburg exit, take Route D north to the stop sign. Turn west and continue on D to County Road 1003. Go north 2 miles on 1003 to the Whetstone Creek CA entrance.

Spring Turkey Season: April 16–May 6, 2007

Area Manager phone number: 573-884-6861

For more information: www.missouriconservation.org/2930 and search "Whetstone"



FOLKS STILL HUNTING for a place to hunt turkeys should check out Whetstone Creek Conservation Area (CA). The 5,147-acre area is located in northeast Callaway County. One-third of the CA is forest land that includes lots of oaks, and as any good turkey hunter knows, where there are acorns you'll find turkeys. Traditionally, hunting pressure

on the area has been low.

When scouting Whetstone Creek CA take advantage of the on-site shooting range to pattern your shotgun. The range, parking lots and privies at the CA are disabled-accessible. Other features of the area include 14 fishable lakes and ponds and primitive camping.

Before hunting at Whetstone Creek or any CA, review the area's regulations. They're available from the area manager (information listed above) or you can also find area brochures through our online atlas at www.missouriconservation.org/2930. Search the atlas by a specific CA name or by county. Once you've located the area you want, click on "area brochure" for a copy of area regulations. You can also use the atlas to research other potential hunting locations in Missouri.



Spring Flowers

Usher in spring with a walk among wildflowers.

Throughout the state you can enjoy the rich purple blooms of Virginia bluebells and wild sweet william. If you enjoy the subtle beauty of pink and red flowers, look for wild geranium and columbine.

Two types of poppies will be popping up this month. The vivid yellow, rounded petals of celandine poppies can brighten any spring outing. Look for them in wooded slopes and moist wooded valleys of the state's central and southeastern counties. Bloodroot is a pretty white poppy with eight to 16 petals of uneven size and length. Travel to the woods often for a glimpse of bloodroots. Their blooms last only one day.

In the southeastern Ozarks look for dwarf crested iris. The showy flower features striking sepals that are bluish to lavender with a conspicuous splotch of orange and white at the base. The smaller petals are uniformly bluish to lavender.

Conservation areas are great places to view wildflowers. To find conservation areas near your home, visit www.missouriconservation.org/2930.



Dwarf crested iris

Counting is for the Birds

Participate in the May Bird Count on May 12.

If you could take a snapshot to capture the migration activities of birds for just one day, what would you see? Answering that question is the goal of the North American Migration Count (NAMC). NAMC is an annual census of migrating birds. The count is conducted on the second Saturday in May, which has been dubbed International Migratory Bird Day. The count gathers information on the abundance and distribution of birds in North America and increases public awareness of migrant songbirds and threats to their habitats. Data from the count is used to further bird conservation. For more information about NAMC, visit www.birdday.org.

FEATHERED FASCINATION



Snowy egret

The Function of Feathers

FROM ENABLING flight to aiding survival, feathers affect virtually every aspect of a bird's life.

No bird could fly without feathers. Wing feathers are arranged so that the wings are more curved on top and flat underneath in flight. This forms an "airfoil," which enables birds to rise off the ground and stay in the air.

Feathers are essential for regulating body temperature. Birds fluff their feathers in cold weather to trap an insulating layer of air between their feathers and skin. The air slows heat loss, helping birds stay warm. Feathers also help birds stay dry. Most birds coat their feathers with oil from a preening gland to create a waterproofing barrier. A few species have special feathers called "powder down," which partially disintegrates into a fine powder that is spread over the rest of the feathers to repel water. Feather color helps birds identify members of their species, which is important for mating and establishing flocks. It also helps birds blend into their surroundings to evade predators.

To learn more about birds in Missouri visit www.missouriconservation.org/8167 or purchase the *Birds in Missouri* book for \$30 plus shipping and handling, and sales tax (where applicable). To order, call toll free 877-521-8632 or visit www.mdcnatureshop.com. Information from *The Birder's Handbook* by Paul Ehrlich, et al., was also used in this segment.



Confluence symposium

The future of the Missouri and Mississippi rivers.

If you have an interest in the history, ecology or economic development of the Missouri-Mississippi river confluence, don't miss Meeting of the Waters: Cooperative Conservation, Recreation and Economic Development in the St. Louis Region. The symposium, May 9–11, will bring together diverse interests for information sharing, dialog and time on the water. Fifteen multiple-track workshops will cover water quality, floods and flood plains, parks and trails, education, river culture and policy and the proposed Lewis and Clark Water Trail. For more information or online registration, call 314-516-5655 or visit www.umsi.edu/meetingofthewaters.



in Level 3 training, allowing data they collect to be used for official purposes. To date, nearly 5,000 Stream Teamers have taken water-quality monitor training, putting thousands of miles of streams under the watchful eyes of those who love them best.

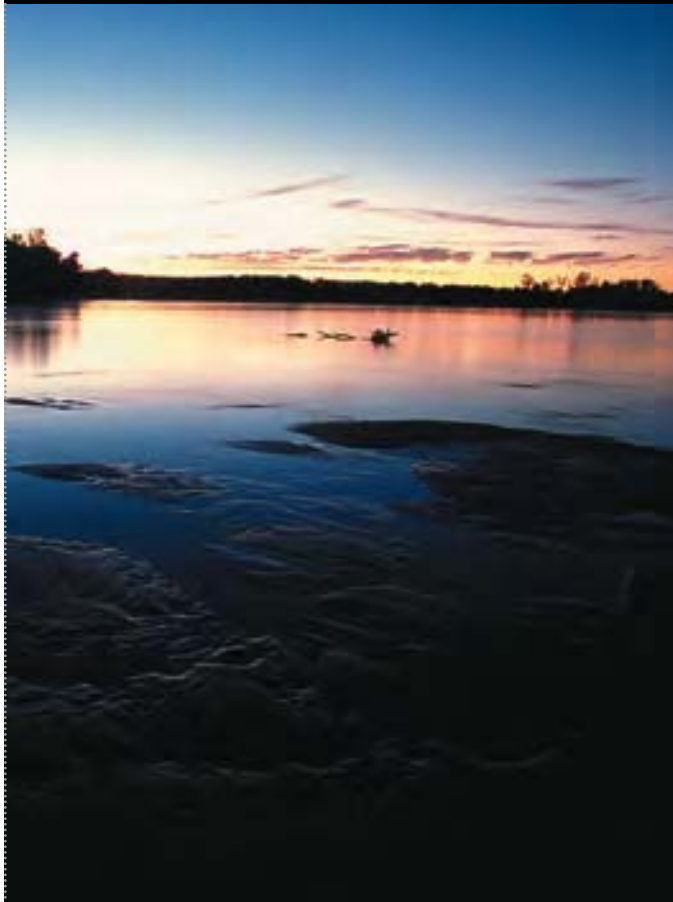
Also in 2005, Stream Teams removed more than 750 tons of trash from streams, conducted nearly 300 educational events, planted more than 4,000 trees and completed more than 30 fish habitat improvement projects. In all, Stream Team members devoted 134,964 hours to stream-related projects ranging from adopting stream accesses to zebra mussel monitoring. The value of those hours topped \$2.4 million.

Stream Team Annual Report

2005 was a busy, productive year for stream lovers.

Record keepers still are compiling reports of 2006 Stream Team activities, but if 2005 was any indication, citizen-led efforts to keep Missouri streams healthy are going great guns. The annual report shows that 300 Stream Teamers took basic water-quality monitoring workshops, 97 moved on to Level 1, and 49 completed Level 2 training. Two were certified by state water-quality professionals

Stream Team



Missouri Rivers Community Network



THE DEVASTATING GREAT Flood of 1993 prompted communities, farmers and commercial interests along the Missouri River to form the Missouri River Communities Network. A few of the group's objectives include:

- Increasing public awareness of the Missouri River and involvement in its management.
- Reconciling the interests of navigation, agriculture, recreation, riverfront development, tourism, historic preservation, flood prevention, land use, ecosystem restoration and water quality.
- Promoting water quality improvement and maintenance of water supply from the river.

They pursue these goals through river cleanups, cultural and historic education and partnerships to balance competing river uses.

Stream Team #: 549

Date formed: February 2000

Location: Missouri River from the Iowa State Line to the Mississippi River

Missouri River Communities Network: 200 Old 63 South,

Columbia, MO 65201, 573-256-2602 or visit www.moriver.org

For more info about Stream Teams: www.mostreamteam.org



Our Glorious Forests

PECK RANCH CA



Size: 23,048 acres

Location: Carter and Shannon counties

Importance: Large, diverse habitat for many plant and animal species; site of 100-year Missouri Ozarks Forest Ecosystem Project, begun in 1990

Things to do: Watch birds and wildlife, photograph nature, picnic, hike, bike, ride horses, hunt, canoe and camp

Online information: www.missouriconservation.org/2930 and search "Peck"

For more information contact the Area Manager: 573-323-4249



SONGBIRDS BEGIN RETURNING to Missouri this month, and many will stop at Peck Ranch for the summer. Since it purchased this vast tract of land in 1945, the Department of Conservation has been using sustainable forest harvesting and prescribed fire to restore the area's original complex of natural communities. As a result,

returning songbirds will find 23,048 acres of pine-oak forests, glades, savannas, woodlands and upland streams in which to feed, nest and raise their young. Some species you can expect to see and hear at Peck Ranch this spring are wood thrush, scarlet tanager and ovenbird.

Department of Conservation ornithologist Brad Jacobs said Peck Ranch is an important summering ground for migratory songbirds. "It provides high-quality, large-scale habitat within the greater Ozark/Ouachita complex," he said. "The next really big summer ranges for forest-dwelling songbirds are the Appalachians to the east and in Minnesota to the north."

TreeLine USA

National Arbor Day Foundation praises utilities.

Trees are as vital to community life as roads and utilities. That's why, in 2006, nine Missouri utilities earned TreeLine USA's recognition for helping trees and power lines coexist. They are AmerenUE, Boone Electric Cooperative, Carthage Water and Electric Plant, City Utilities of Springfield, Columbia Water and Light, Crawford Electric Cooperative, Cuivre River Electric Cooperative, Independence Power and Light, Kansas City Power and Light, and Ralls County Electric Cooperative.

For more information about the program, call 573-751-4115, ext. 3116.



Arbor Award of Excellence

Many recognized for community tree care in '06.

Taking care of community trees takes awareness, commitment, funding and lots of skilled work. In 2006, three organizations and two individuals won recognition for their outstanding, sustained community tree care. The City of Richmond Heights, St. Louis Community College at Meramec's Horticulture Department and Sturgeon resident Bill Frazier all claimed the Missouri Arbor Award of Excellence. Citations of Merit went to the City of Ballwin and to Hermann resident Mary Fritz.

The Missouri Arbor Award of Excellence represents the Department of Conservation's and the Missouri Community Forestry Council's combined recognition of those who act as good stewards for community trees. The 2007 award application deadline is Oct. 31. Visit www.missouriconservation.org, keyword "arbor," for more information.





Co-op for quail

Good neighbors make good quail habitat.

If you're concerned about the quail's decline in your rural neighborhood, consider starting a management cooperative to bring them back. Get together with your neighbors and your local Missouri Department of Conservation private land conservationist. He or she can provide technical expertise or



coordinate a field tour of habitat improvements. Cooperating landowners can share work and expertise, and split the costs of equipment rental,

chemicals and seed. For information about starting a co-op, call your local Conservation office (see page 3 for phone numbers).

Whack bush honeysuckle

This pretty-but-pushy bush threatens our woodlands.

It's the first shrub in the woods to green up and the last to lose its leaves. It produces fragrant flowers and loads of bright red berries. So what's the problem with exotic bush honeysuckle? It spreads like wildfire, displaces native plants and gobbles up native wildlife habitat.

If you love Missouri's native plants and animals, control bush honeysuckle on your land. April is a good time to hand-pull small plants, or cut and spray the stumps of larger ones with a 20 percent solution of glyphosate using a low-pressure, hand-held



sprayer. Check with your local agriservice dealer, university extension office or Department of Conservation forester for

additional recommendations (see page 3 for a list of MDC office phone numbers).

Control fescue for more wildlife

Habitat Hint



Habitat type: Native grasslands, including patches of bare ground and native wildflowers, vines and shrubby thickets

Wildlife affected: Rabbits and upland birds such as quail, indigo buntings and loggerhead shrikes

Main threats: Fragmentation and invasion by non-native plants such as fescue

Best practices: Active restoration and periodic disturbance with grazing, fire, mowing or herbicide application

Phone contact: To locate a private lands conservationist near you, see page 3 for a list of regional office phone numbers.

For more land management information: www.missouriconservation.org/7905

MANY LANDOWNERS FAVOR fescue for cool-season cattle forage, but its thick turf keeps quail chicks from foraging and fledging. If you want to give chicks a better chance of surviving on your land, control fescue, especially if it's near food plots, native warm-season grasses or shrubby areas. This month is a great time to do it. Shortly after green-up, spray fescue with a glyphosate herbicide such as Roundup®, Buccaneer® or Glyphos®. You'll be rewarded with more quail calls, more rabbits and better hunting in the fall.



Get Ready to Bash Mo' Trash

Volunteers get supplies and recognition pins.

Take action against our state's litter problem—get involved in this year's No MOre Trash! Bash. Throughout the month of April, the No MOre Trash! program provides free trash bags and educational materials to help Missourians clean up trash and spread the word about litter-free living. A cooperative effort of the Missouri departments of Conservation and Transportation, the No MOre Trash! program raises awareness about the damage litter does to our health and environment. Trash Bash volunteers who report their activity will be recognized with a lapel pin.

Last year's No MOre Trash! Bash was very successful, drawing 9,015 volunteers. Together, the volunteers picked up 17,091 bags of trash from Missouri roads and out of Missouri streams. In addition to the bags of trash, groups picked up untold numbers of tires and other items too big to place in trash bags. To find out where to get materials for this year's No MOre Trash! or for more information about the program, visit www.nomoretrash.org.



Earn College Credit

Apply for the Conservation Honors program by April 13.

Offered by the Department of Conservation in cooperation with the University of Missouri-Columbia, the Conservation Honors program is a six-day summer course that gives current high school juniors and volunteer teachers academic training and field experience in forest, fish and wildlife management, nature interpretation, outdoor skills and public speaking.

This year's program runs from June 10 through 15. For an application and more information, contact Elaine Callaway, conservation education consultant, at 573-635-9824 or Elaine.Callaway@mdc.mo.gov.

NATURE ACTIVITY



Kids' fishing days at state trout parks



IF YOU WANT to put a smile on your favorite kid's face, take him or her to one of the state's four trout parks on Kids' Fishing Day. This year Bennett Spring State Park and Montauk State Park will hold their

Kids' Fishing Day on May 5th. Roaring River State Park and The James Foundation's Maramec Spring Park will hold their Kids' Fishing Day on May 19th. Rainbow trout will be restocked all day long, and volunteers will be on hand to help kids fish. There will also be prizes, contests, exhibits, fly-fishing classes, free hotdogs and soda. Contact the trout park listed below that you plan to visit, or go online, for the exact times and activities. Anglers age 15 and younger will receive a free daily tag.

Be here: State trout parks

These days: May 5th and 19th

Have fun: Fishing and learning about trout

Phone numbers: Roaring River Hatchery near Cassville, 417-8847-2430; Bennett Spring Hatchery near Lebanon, 417-532-4418; Montauk Hatchery near Licking, 573-548-2585 or Maramec Spring Hatchery near St. James, 573-265-7801

For more info: www.missouriconservation.org/4164





Hide *and* Seek

I WAS DETERMINED TO TAKE PHOTOS
OF THE RARE AND REGAL KING RAIL.

Story and photos by Noppadol Paothong

Wildlife photographers don't have normal working hours. Hoping to capture the mating behavior of king rails, I rose at 1 a.m. one day last June and drove from Jefferson City to a wetland area north of St. Louis.

Accompanied by the sounds of countless bullfrogs seemingly trying to harmonize, I waded through water and thick vegetation to a place where I'd spotted king rails just a few days earlier. With two cameras—one wide-angle and one supertelephoto—and an electronic caller set up beside me, I watched the sun rise.

I hoped the king rails would still be there.

Bodies of king rails are flattened slightly from side to side. The narrow shape enables them to slip through dense marsh grass without moving it. They spend most of their time hiding in tall grasses, and prefer freshwater marshes and shrub swamps with a water depth from ¼-inch to 10 inches.

The mating ritual of king rails has rarely, if ever, before been photographed. A male approaches a female from behind. The female takes a mating position with her tail high, as the male holds her neck with his beak.

King Rails live in wetlands from the Gulf Coast to North Dakota. Most birds winter on the coast, but a few migrate to Missouri sometime in late winter or early spring and stay until fall.

King rails are abundant enough to be considered game animals in several southeastern states, but they are not easy to find—much less photograph—in Missouri. Though they used to be common in the marshes along our large rivers, only a handful of these birds now visit our state each year. King rails are classified as endangered in Missouri.

Not only are they rare, but they are hard to see. With their rusty-colored body plumage, striped flanks and thin silhouette, they blend perfectly with wetland vegetation. They are also naturally elusive, usually spending most of the day hidden in dense grass. Researchers have to walk shoulder to shoulder to get them to flush.

Fortunately, king rails readily respond to calls. A king rail's repertoire of calls includes a series of loud "keks," deep grunting sounds, clicks and trills. Listening for responses to electronic calls is how researchers keep track of populations of king rails, and how Department of Conservation wildlife biologists know that king rails' visits to conservation areas in Missouri are rare.

Called and Failed

I had tried for months to photograph king rails in the wild. I started at B.K. Leach Conservation Area after Brian Loges, a Department wildlife biologist at Elsberry, told me where he'd seen king rails.





Following his advice and directions, I set up in marsh grass with my cameras and called and called and called. Then I called some more from other spots. All to no avail.

For several months, I questioned numerous bird experts about king rails and read several articles about the species. It was frustrating trying to understand the behavior of a bird that I'd never seen.

I didn't give up, though. One evening after a long day of rain, I sat concealed in smartweed playing my electronic calls.

I started by calling every 10 seconds, then I switched to every 30 seconds. It was quiet, but then suddenly a bird responded with "kek, kek, kek, jupe, jupe, jupe."

I grabbed my camera and aimed toward the sound. All I could see was thick vegetation.

As I searched, the bird called again, but this time the sound was much louder. I turned my head and saw a male king rail standing no more than 3 feet behind me.

I froze for fear of spooking the bird. It pecked around nearby, even investigating my camera backpack. A female bird later showed up, then the pair chased one another off into the tall vegetation.

During the first warm days of late April, king rails begin to call for their mates. Early in the morning and throughout the night, males make a series of "kek-kek-kek," and "jupe-jupe-jupe" calls.

King rails stand 14–20 inches tall and have a wing span of about 20 inches. On average they weigh just under a pound. The males are about 25 percent larger than females.



Rails will defend their nest from an intruder by puffing out and bristling their feathers. King rails are known to return to the same nesting area year after year. Both adults incubate the eggs for about 22 days.

I was mad at myself for not being prepared. Because I hadn't seen king rails the other times, I'd become lax and wasn't set up and ready for when they finally did appear. In my years of photographing wildlife, this was by far my most embarrassing moment.

Although they never got that close again, the birds circled around and called for the next two hours, and I was able to capture my first king rail images.

Caught in the Act

Now that I knew the pair's location, I was eager to return. I was optimistic that, if properly set up, I could get some good pictures. After all, not only had I not spooked the king rails, they seemed to completely ignore my presence, even when they had been at my feet.

That's why, three days later—my first opportunity—I was watching the sun rise at the very same spot.

I played my electronic call for 30 minutes with no response. I was thinking I might be wasting my time, when I was startled by a splash of water. A king rail was swimming directly toward me.

It certainly wasn't a wasted morning. I had the bird in front of me for hours. The rail wasn't bothered by me as long as I didn't make sudden movements. When I slid through the mud or adjusted my camera angle, the rail would retreat into the smartweed a little ways, but she'd soon come back out again.

After a while, I was observing the bird more than I was taking pictures. As I watched, she suddenly stopped moving. Seconds later

a male bird approached from behind, and the female lowered her head in a submissive pose.

I reached for my camera and fired away. The mating lasted for only a few seconds. When it was over and the birds had left, I worried whether I'd had them in focus or if there might have been a branch in front of them. My hands were shaking as I checked the LCD screen on the back of the camera. I scrolled through the images and was relieved to find that I'd gotten all I could hope for. I'd even captured some images I didn't recall taking.

Next, the Nest

After my success with the mating birds, I decided to try to take pictures of a king rail nest and brood.

Female king rails lay an average of about 11 eggs. The eggs are a pale buff color with brown markings. Both adults incubate the eggs, which hatch in a little over three weeks. The chicks are downy black and leave the nest within a day after hatching. Adults feed them for a few days, but the chicks often stay with their parents for more than a month.

If king rails are hard to find, locating king rail nests is next to impossible. I returned to the area several more times searching for the nest or brood but never had any luck.

Nests are often concealed by arched green grasses. After hatching, only about 50 percent of chicks survive their first month.



Rails eat a variety of foods including insects, crustaceans, fish, aquatic plants, amphibians and many seeds. Young birds are completely covered with black down and depend on adults to feed for the first couple of weeks before feeding on their own.



Then, almost by accident, Ron Bell, manager of Squaw Creek National Wildlife Refuge in Mound City, and I found what we thought to be a king rail nest. We weren't sure because it had been more than 30 years since a king rail nest had been confirmed at the Squaw Creek refuge. But, as we stood in waist deep water wondering about our find, we heard the unmistakable call of a king rail. Then, a male and female king rail ran back and forth in front of us.

Ron marked the location of the nest with his GPS unit. When we checked it a week later, all the eggs were hatched and the brood was gone. We're hoping the birds will return next year.

A few weeks later, Candy Chambers, assistant refuge manager at Clarence Cannon National Wildlife Refuge in Annada, called to tell me about a king rail brood she saw early that morning. I met with her that afternoon, and she took me to the brood right away.

I spent the next several hours observing and photographing an adult king rail and her four 2-week-old chicks foraging for food along a mud flat. In fact, I made many more trips during the next month to capture the birds with my cameras. After a few trips, they just seemed to ignore me and would feed, rest and bathe no more than 3 feet from me.

It wasn't easy out there. Many days I spent 12 hours under the hot summer sun and under constant attack by mosquitoes and ticks. I got some unique pictures, though; and for a wildlife photographer, there's no better reward. ▲





Queen *of the* Kingdom of Callaway

*Eastern gamagrass
returns to a central
Missouri farm.*

BY BONNIE CHASTEEN



Through careful observation and trial and error, Clifford Borgelt improves his native-grass management. This year he plans to add more Eastern gamagrass and red clover paddocks to his grazing system.

An extraordinary event is occurring just north of I-70 between Kingdom City and Columbia. An ancient queen is returning to the Kingdom of Callaway. And, true to her noble nature, she's rewarding those who serve her with health and prosperity.

An ancestor of hybrid field corn, the queen is Eastern gamagrass, a tallgrass prairie species. Before settlement, deep-rooted Eastern gama grew in Missouri's bottomlands and wet prairies, where it soaked up water and provided habitat for wildlife, especially grassland birds.

When settlers came, they replaced Eastern gamagrass with more familiar Old World crop and forage species. Unfortunately, these aren't nearly as good as native plants at controlling stormwater, supporting wildlife or feeding livestock during late summer months and periodic drought years.

Today, land managers are rediscovering Eastern gamagrass and its many virtues. Farmers especially appreciate the species' lush, warm-weather productivity and drought-resistant qualities, and some stock growers have even been inspired to call it the queen of forage grasses.

Clifford Borgelt is among Eastern gamagrass's many devotees.

"In the hot months," he said, "Eastern gama really puts the pounds on the cattle."

One June morning, his Eastern gamagrass leaves were thigh-high and the tassel-like seedheads nodded in the cool morning air. Across the lane, his herd of stocker steers was busy cleaning up a paddock of Eastern gama and red clover, Clifford's favorite forage legume. He planned to turn them into the new paddock the next day.

"This mix of gama and red clover lets my cattle maintain their rate of gain," he said. "Especially in a drought like we had in 2005."

As he looked out over the crown-shaped bunches of grass with their fringy seedheads, Clifford mused, "I wish I had a hundred acres of this stuff."



A HEALTHY PRAIRIE

Like most farmers, Clifford appreciates any approach that helps him make more money with less cost and effort. His reasons for using Eastern gamagrass for help with his farming operation, however, are unusual and deeply personal.

In the early '90s his wife, Mary Ann, got sick and couldn't get well. It turned out that she is allergic to petro-

chemicals—or anything made with oil. She and Clifford replaced their synthetic carpets with wool and cotton rugs, and they gave away any item of clothing made with polyester or acrylic.

Although the changes Mary Ann and Clifford made to their house kept her safe inside, they couldn't protect her from the things Clifford commonly used in his row-crop and cattle-feeding operations: oil, herbicides and fertilizer. What do you do when you discover the main tools you use to make a living threaten your beloved's health?

"We decided to put the fields near the house in native warm-season grass," Clifford said.

Mary Ann herself came up with this solution one bright fall day when she and Clifford had driven south of Kingdom City to visit her cousins, Larry and Garry Houf.

At the time, Larry was the Department of Conservation's district wildlife supervisor for the Ozark region. He and Garry, a forest biologist with the Mark Twain National Forest, had planted their family farm in native warm-season grasses, which turn rich, warm shades of gold, orange, red and purple in the fall.

"Mary Ann really liked those colors," Clifford said, "she asked why we couldn't plant those grasses on our place."

At the time, Clifford didn't know much about planting prairie grasses or designing management-intensive grazing forage systems, but he soon found out.

Tips for Growing Success

Whether you're a stockgrower, an acreage owner or a park landscape manager, you can use these tips to help ensure a good stand.

Get help. Your county's USDA service center, which includes personnel from the Farm Service Agency, the Natural Resources Conservation Service, the Soil and Water Conservation District and the Missouri Department of Conservation (see page 3 for a list of regional office phone numbers to get contact information), can help you find the seed, the equipment and even an experienced contractor to plant native warm-season grasses properly.

Kill existing cover and prepare the seedbed. Eastern gamagrass and other native warm-season grasses can't compete against fescue and other non-native species. Use a non-selective herbicide to kill them, once in the fall and again in the spring before green-up.

Buy cold-treated seed. Eastern gamagrass seed has a higher dormancy percentage than other native grasses, and dormant seed won't germinate unless it has been held in cold storage a certain length of time.

Install it at the right time, in the right way. The best time to plant is late spring or early summer. Plant large areas using a corn planter. Unlike other native grasses that have chaffy seed, Eastern gamagrass seed is about the size of corn kernels. Make sure to set the planter no more than 1 inch deep.



Cattle thrive on Eastern gamagrass and red clover, even during drought years.

HELPING HANDS

Clifford first met Missouri Department of Conservation grassland biologist Steve Clubine in 1991 at a Missouri Prairie Foundation meeting. They talked about adding native warm-season grasses to Clifford's operation.

Steve visited Clifford's farm and suggested a planting mixture of big bluestem, Indiangrass, little bluestem, sideoats grama, Eastern gamagrass and Illinois bundle-flower on 87 acres of his 575-acre operation. The Borgelts also planted a 5-acre buffer next to the house to protect Mary Ann from corn herbicides.

In 1994, Steve scheduled a drill and operator to plant Clifford's 92 acres. 1994 wasn't as wet as 1993, the year of the Great Flood, but it still rained a lot and weeds were heavy. In spite of this, Clifford kept his paddocks clipped, which gave the grasses a chance to establish. Steve inspected the planting a couple of times the first and second summer, and Clifford began grazing it in 1997.

In the meantime, Clifford also attended a management-intensive grazing school presented by the Audrain County Extension and local United States Department of Agriculture service center staff. There he learned the basics of rotating tight groups of cattle quickly through small paddocks of mixed grasses and legumes.

“In the hot months, Eastern gama really puts the pounds on the cattle.”

—Clifford Borgelt

He also sought help from his USDA service center in Fulton. Resource conservationist Cheryl Livengood helped Clifford complete his grazing system with cost-share programs for water lines and tanks. She also wrote his burn plans. Like all native prairie grasses, Eastern gama benefits from periodic burning, so he added prescribed fire to his forage system management regime.

HE SAID, SHE SAID

She wanted to make the farm natural; he wanted to make it pay. Switching from row crops to summer grazing granted both their wishes.

Like most of his neighbors, Clifford grew row crops such as corn, beans and wheat in the summer, and he fed light calves to 1,200-pound “fats” in the winter. His nearly 600 acres of flat, poorly draining, silt-loam Putnam clay did about as well as any similar farm in his neighborhood.

Since dropping crops and winter cattle feeding, however, his earnings per acre have increased. This is because his production expenses are low, his cattle are able to maintain a steady rate of gain during the summer, and cattle prices have been strong the last several years. He said that adding Eastern gamagrass with red clover to his grazing system helps make his farm more profitable.

“Native warm-season grasses are ready when European cool-season grasses like timothy and brome fade out,” Clifford said. “Even as dry as it was in 2005, my Eastern gamagrass stayed green.”

Although he appreciates other native warm-season grasses, he finds that only Eastern gamagrass will tolerate



Why are these people smiling? The switch to native grasses has eased Mary Ann’s allergies and rewarded Clifford with more farm profits and less work.

red clover. In fact, Eastern gamagrass performs best for both livestock and wildlife when it’s mixed with other grass and legume species.

While it’s true that Clifford is enthusiastic about Eastern gamagrass, he admits it does have a downside. “It’s slower to establish,” he said. “You need to get a good stand the first time you plant, because it’s hard to thicken it up later.”

GOOD FOR LIFE

It’s pure fancy to say that Clifford and Mary Ann Borgelt serve the queen of the Kingdom of Callaway. It’s also inaccurate—it implies submission and sacrifice. In fact, establishing Eastern gamagrass on their operation has helped the Borgelts achieve the freedom to enjoy retirement on their family farm with less work, more income and better health than if they had continued farming as usual.

It’s far more accurate to say that the Borgelts and their gamagrass sustain each other, as well as the natural community upon which we all depend. ▲



Hunting for Fishy Waters

*For great fishing off the beaten path,
try conservation area ponds.*

BY JOE BONNEAU, PHOTOS BY CLIFF WHITE



Those who hunt on public lands often find the best success far from roads and parking lots. Walking that extra mile, targeting remote areas, and getting away from others are proven strategies for success.

These same tactics can also produce big dividends when it comes to fishing public waters. This is certainly the case on many of the hundreds of unnamed, often overlooked ponds tucked away on Department of Conservation areas. Although fishing these ponds may pose a few challenges, a good game plan and some persistence can open the door to exceptional fishing.

Giving up Amenities

Public lakes are popular not only for quality fishing, but also for amenities like boat ramps, privies, mown shorelines and fishing jetties and docks. However, such amenities are typically not possible, practical, or even desirable on most conservation area ponds. In fact, the secluded, primitive nature of these ponds makes fishing them a unique experience.

Most of the time you will need conservation area maps to locate ponds because many of them will not be visible from the road or have signs directing people to them.



The sun sets on a good fishing day at Maple Leaf Lake Conservation Area (CA) in Lafayette county in the Kansas City region. For information on how to find a CA near you, see the "Finding a Pond" information box on page 30.

Bring bug repellent and watch out for poison ivy. The trouble is worth it, though. If you are willing to “rough it” a little, you will often find great fishing.

Many ponds will require a cross-country hike to access—anywhere from a short walk to a several-mile hike—so bring bug repellent and watch out for poison ivy. The trouble is worth it, though. If you are willing to “rough it” a little, you will often find great fishing.

Small Waters—Big Fish

Many anglers believe that you need a big lake to produce big fish, but this is simply not true. Some of the Midwest’s largest bluegill, crappie, redear and largemouth bass, including several Missouri state record fish, have been caught in ponds.

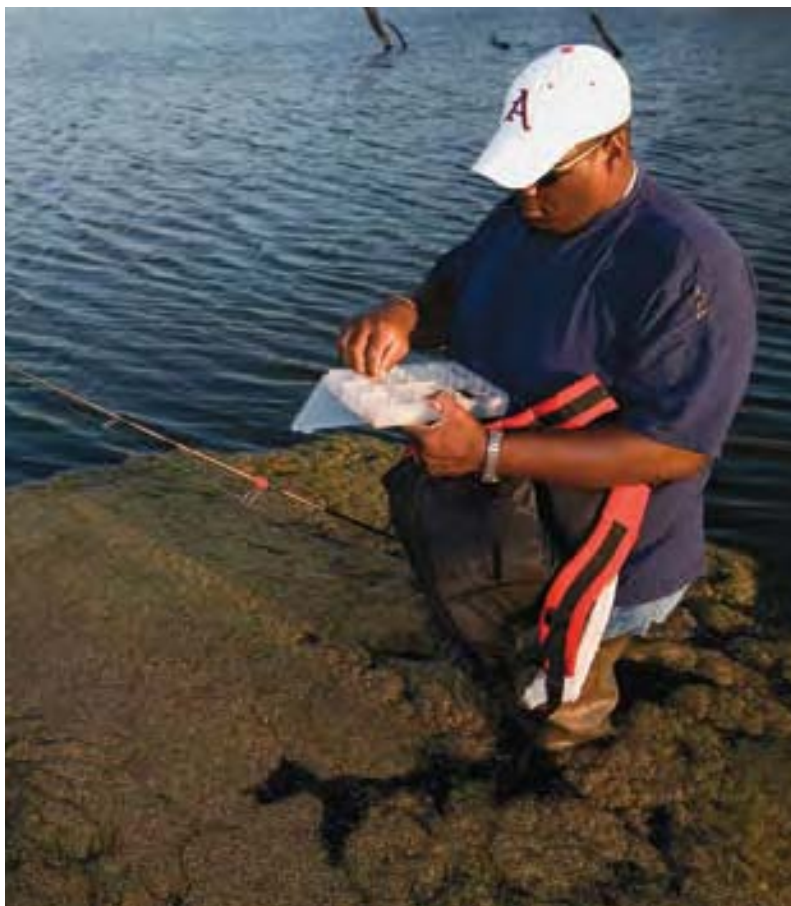
As long as a pond has good fish habitat and a balanced fish community it can produce catches that rival any lake. Those who fish private ponds know this to be true, but many anglers don’t realize that ponds on public lands can also provide great fishing.

A Mix of Fishes

The fish community in conservation area ponds usually consists of largemouth bass, bluegill, channel catfish and, occasionally, redear sunfish. It’s the same combination that is recommended to private pond owners.

This mix of species works well together and reliably produces quality fishing under a variety of conditions. Other species either do not fare well in ponds or they create management problems.

A healthy largemouth bass population is the key to good fishing in ponds. This predatory fish is at the top of the pond food chain. In a balanced system, bass consume many of the small bluegill, which allows the remaining bluegill to grow large. If you remove too many



Vegetation usually makes ponds better for fishing. Try casting along weed edges, or drop lures or baits into pockets in the vegetation.

Good Fishing Ponds

Although fishing is the best way to determine whether a pond is a good fishing spot, you can often quicken your search by looking for ponds with the following characteristics:

Good water quality—If the pond is regularly turbid (i.e. you can only see a lure a few inches under the surface) the fishing will probably not be very good.

Sufficient depth—Ponds need to have areas that are at least 8 feet deep or they may be subject to periodic fish kills and may contain only small fish or no fish at all.

Aquatic vegetation—In summer, many ponds seem overrun with aquatic vegetation. Don’t let this discourage you. These ponds often produce big fish. Try to fish the ponds in spring or fall when the vegetation is less abundant, or use tactics that allow you to fish through the weeds.

bass from a pond, you'll end up with an overcrowded, stunted bluegill population. That's why releasing some of the bass you catch helps to maintain a pond's overall fishing quality.

Finding Good Ponds

Not all conservation area ponds provide exceptional fishing. The trick is finding the good ones.

Start by looking at conservation area maps and locating out-of-the-way ponds. Because these ponds are lightly visited, fisheries biologists and other anglers aren't the best sources for fishing information. You may need to evaluate ponds on your own by fishing them.

It's fun to fish new places, especially when you might discover a fishing gold mine. Will this be the pond that produces the bass of a lifetime or a stringer of 9-inch bluegill? You never know, and that's a good part of the attraction.

You sometimes can get a good idea of what a pond holds by slowly and quietly walking along its banks and looking for fish. This works best in spring before vegetation becomes thick. You can often tell if a pond contains large bluegill, for example, by looking for tell-tale elephant tracks (spawning beds).

Water temperatures warm quickly in small ponds, so the best spring fishing will begin earlier than in larger lakes. Starting off the spring by fishing ponds is a great way to lengthen the spring fishing season.

Pond Fishing Tactics

You can fish most ponds from shore. Even deeper water is often reachable from the bank. If you're not sure where in a pond to fish, no problem. Fish it all! After a trip or two, you will learn which areas of the pond produce the most fish.

Will this be the pond that produces the bass of a lifetime or a stringer of 9-inch bluegill? You never know, and that's a good part of the attraction.

The tackle and methods you use on larger waters work well on ponds. Many times, they work better, because fish in remote ponds are less lure-shy than fish in easily accessible lakes that receive heavy fishing pressure.

For more information about pond fishing, visit www.missouriconservation.org/7726.

Other Rewards

Catching a bunch of fish is not the only benefit to venturing out and searching for secluded fishing hotspots. As you hike around conservation areas, you may discover great turkey hunting locations, morel mushrooms, blackberry patches and neat walking trails.

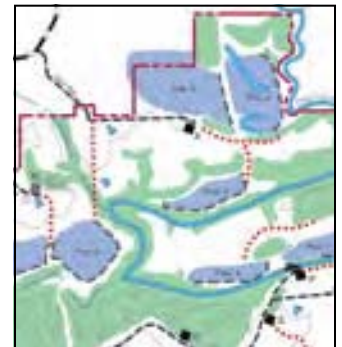
While fishing, you may see a family of wood ducks weaving their way along the shoreline or a deer coming down to the water for a drink.

Fishing conservation area ponds is a great way to experience the outdoors, get some exercise and improve your state of mind. Keep at it, and you're sure to find some great new fishing spots, too. ▲

Finding a Pond

For a complete list of conservation areas in Missouri, use the online Conservation Atlas at www.missouriconservation.org/2930 or get a copy of Missouri's Conservation Atlas. To order, call, toll-free, 877-521-8632, or write The Nature Shop, P.O. Box 180, Jefferson City, MO 65102. You can also order online at www.mdcnatureshop.com.

Maps of individual conservation areas can be found online using the online Conservation Atlas, or you can contact your nearest Missouri Department of Conservation regional office and request an area brochure (see office phone numbers on page 3).





Many conservation areas have remote ponds where you can find solitude, natural beauty and, if you're lucky, big fish. To find out how to get information on fishing regulations on conservation areas read *Agent Notes* on page 33.

Hunting and Fishing Calendar

HUNTING

	OPEN	CLOSE
Coyotes	5/7/07	3/31/08
Crow	11/1/07	3/3/08
Deer		
Firearms	11/10/07	to be announced
Groundhog	5/7/07	12/15/07
Rabbits	10/1/07	2/15/08
Squirrels	5/26/07	2/15/08
Turkey		
Spring	4/16/07	5/6/07
Youth resident only	3/31/07	4/1/07

Light Goose Conservation order

please see the *Waterfowl Hunting Digest* or see www.missouriconservation.org/hunt/wtrfowl/info/seasons

FISHING

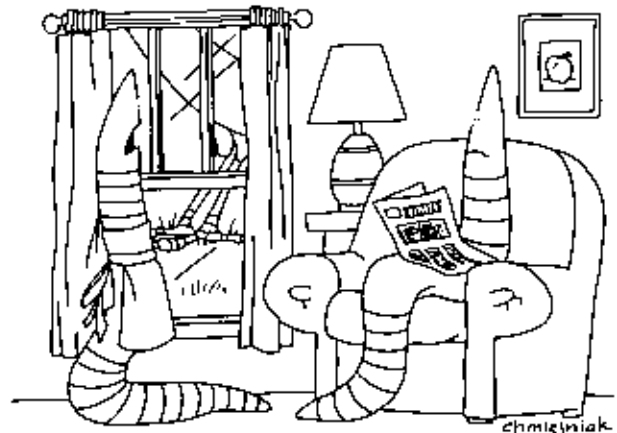
	OPEN	CLOSE
Black Bass (certain Ozark streams, see the <i>Wildlife Code</i>)		
	5/26/07	2/29/08
impoundments and other streams year-round		
Bullfrog	Sunset	Midnight
	6/30/07	10/31/07
Nongame fish snagging	3/15/07	5/15/07
Paddlefish	3/15/07	4/30/07
Paddlefish on the Mississippi River	3/15/07	5/15/07
Trout Parks	3/1/07	10/31/07

For complete information about seasons, limits, methods and restrictions, consult the *Wildlife Code* and the current summaries of *Missouri Hunting and Trapping Regulations* and *Missouri Fishing Regulations*, the *Fall Deer and Turkey Hunting Regulations and Information*, the *Waterfowl Hunting Digest* and the *Migratory Bird Hunting Digest*. For more information visit www.missouriconservation.org/8707 or permit vendors.

The Department of Conservation's computerized point-of-sale system allows you to purchase or replace your permits through local vendors or by phone. The toll-free number is 800-392-4115. Allow 10 days for delivery of telephone purchases. To purchase permits online go to www.wildlifelicenses.com/mo/.



Take part in the upcoming spring turkey season. The season opens April 16 and closes on May 6.



"Is there anything more depressing than the first robin of spring?"

Contributors

JOE BONNEAU has worked for the Department for nearly 10 years, first as a fisheries biologist and now as a fisheries regional supervisor. His hobbies include hunting and fishing, especially with his wife, Lisa, and their three children, Donnie, Grant and Kaylynne. They live in Odessa.



BONNIE CHASTEEN wears many hats in the Department's Outreach and Education Division. She coordinates communications for the Web site, writes for the *Conservationist* and edits print publications. When she's not writing about conservation, she's cooking, painting or traveling to visit family and friends.

Department of Conservation photographer NOPPADOL PAOTHONG discovered his love and passion for wildlife photography in college in 1995. Born in Thailand, he came to the United States in 1993 to study graphic art before switching to journalism. He has worked as a full-time photographer at the *Joplin Globe* and the *Springfield News-Leader*, and has achieved more than 60 regional and national awards.



TIME CAPSULE

November 1970

The article *Young Hunter Safety*, written by Bev Chamberlain, reported that Columbia was the first Missouri city to conduct a citizen-supported youth hunter safety clinic. The concept for youth hunter safety clinics is credited to outdoor writer James A. O.

Crowe of the *Detroit News*. Crowe's clinics were the source of many of the ideas proposed by David Chamberlain, Midwest field representative for the National Shooting Sports Foundation, to the editor-publisher of the *Columbia Daily Tribune*, Henry J. Waters III. Waters decided to sponsor the clinic, and Columbia citizens provided the manpower. The clinic was held Oct. 31 with the assistance of approximately 100 citizen volunteers. Areas of instruction included shooting skills, firearm maintenance and sportsperson-farmer relations.—Contributed by the Circulation staff



AGENT NOTES

Where to find fishing and hunting regulations for Conservation Areas.

HAVE YOU EVER wondered how to find fishing and hunting regulations for a Conservation Area (CA)? Some areas, such as August A. Busch Memorial CA, have some regulations that differ from the standard statewide regulations listed in the *Wildlife Code*.

Special regulations for CAs can be found in a number of places. Large areas usually have their own brochure with regulations and a map of the area. Brochures are available at area headquarters or area parking lots. You can also find area brochures through our online atlas at www.missouriconservation.org/2930. Search the online atlas by a specific CA name or by county. Once you've located the area you want, click on "area brochure" for a copy of area regulations.

Some special regulations are also listed in *A Summary of Missouri Fishing Regulations*. This booklet is published annually and is available at permit vendors. A detailed list of CAs and their regulations is available on the Missouri Secretary of State Web site at www.sos.mo.gov/adrules/csr/current/3csr/3csr.asp. Chapters 11 and 12 give rules for the Department of Conservation's owned and leased areas.

There are hundreds of CAs in the state that provide a wide variety of outdoor recreation opportunities. Take some time to find out the regulations for the areas you would like to visit.



Dave Guntli is the conservation agent for St. Charles County, which is in the St. Louis region. If you would like to contact the agent for your county, phone your regional Conservation office listed on page 3.

behind the CODE

What's in your bag? Learn bag limits for local waters.

BY TOM Cwynar

Bag limits are the number of fish anglers can legally keep in one day. The Department of Conservation sets statewide daily bag limits for most species of game fish.

Many public fishing areas, however, have bag limits that differ from the statewide bag limits. These regulations are posted at water access sites and at area headquarters.

Special area regulations for Missouri's large reservoirs and rivers and streams are also found in the *Wildlife Code* and in *A Summary of Missouri Fishing Regulations*, which is published annually and is available wherever you buy your fishing permits. You can also find a PDF copy of the fishing regulations summary on the Department's Web site at www.missouriconservation.org/2115.



Area bulletin boards and fishing regulations summaries make important reading, because anglers are responsible for knowing and following the rules that apply to the waters they are fishing. If in doubt, call the regional office (contact numbers are listed on Page 3) for specific information about an area.

According to Fisheries Programs Supervisor Mike Kruse, anglers don't always opt to take their bag limit for a species during an outing. However, the presence of bag limits serves to protect fish populations on those occasions when the fish are vulnerable to overexploitation.

Bag limits aren't meant to be targets. Take only the fish you know you can use and gently release the rest.

“I AM THE NEXT GENERATION OF CONSERVATION”

Mary-Louise Jackson lives in Cole County and enjoys visiting the Runge Nature Center in Jefferson City with her children. To learn more about conservation activities, visit www.missouriconservation.org.



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